Scenario - Run Heuristic SAP_MULT_SCH in PPDS Planning Board

Purpose

This page describes how to use heuristic SAP_MULT_SCH in PP/DS Planning board.

Overview

As of SCM Rel. 7.02, heuristic SAP_MULT_SCH (Function module /SAPAPO/HEU_MULTIRES_SCHED) is introduced to be used in Process Industry scenarios. You can use this algorithm to switch modes and sources of supply according to defined time blocks, so as to keep the receipts as close to the required date as possible.

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Requirements

- Location / Products / Resources.
- Sources of supply. e.g. PDS (Alternative PDS should have different resources).
- Multiple orders for the finished product on the same day.

Example Creation

- Product CY-01@Q65002
- Location PL0001@Q65002
- Resource WW-01_0001_001, WW-11_0001_001, WW-21_0001_001
- PDS

PDS Test 1 is using resource WW-01_0001_001
PDS Test 2 is using resource WW-11_0001_001
PDS Test 3 is using resource WW-21_0001_001
Multiple orders for the finished product on the same day:

**Step 1: Check Customizing**

In transaction SFW5, activate business function SCM-APO-PPS, Continuous Production and Multi-Resource Scheduling (SCM_APO_PPDS_PI).

**Step 2: Setup Heuristic**

In transaction /SAPAPO/CDPSC11, copy heuristic SAP_MULT_SCH to be ZAP_MULT_SCH with the following settings:
Step 3: Include the heuristic in heuristic profile
Step 4 Run the heuristic in PP/DS Planning board

4.1 Goto transaction /SAPAPO/CDPS0, Select the overall profile SAP001 and planning version 000. Enter the resource, location, and product in which the orders exist. Execute.
4.2 In "Profiles...", change to use heuristic profile SAP001 with Customizing ID MULT:
4.3 Select the product with the orders. Go to Functions -> Heuristic -> Multi-Resource Scheduling Heuristic and run the heuristic.
4.4 The orders are scheduled in alternative modes, and different sources of supply are chosen after the switch over time.

FAQ

1. Does SAP_MULT_SCH heuristic works in MTO scenario?
   Answer: Yes.
2. SAP_MULT_SCH needs alternative PDS/PPM, should they have exact same structure? (e.g. should they have same operation number, only different resource in the mode?)
   Answer: It can be different. However, it is good to have same structure as it checks alternatives.
3. Is it ok if the PDS have several operations, but only one operation uses different resource?
   Answer: Yes, but selection of objects during scheduling has to be carefully selected and the results to be analyzed as it might be complex to understand in such situations.
4. We define period in the heuristic. Should the period cover the whole order? That is, the length of the period should be enough to cover
4. The heuristic needs multiple orders for the finished product on the same available date. How about order available time? Do they need to be on same available time?
Answer: In Case of bucket capacity, time would not be a concern on the same day. In case of Time continuous capacity yes.

Related Content

Related Documents
SAP Help Multi-Resource Scheduling Heuristic

Related Notes
SAP 2173059 - /SAPAPO/CDPS0: SAP_MULT_SCH does not schedule when using resource as selection criteria.